

WHAT IS CLAIMED IS:

1. A storage system comprising:

a first storage unit for storing information from a first server;

a second storage unit for storing the information stored in said first storage unit;

a storage device connected with said first storage unit and with said second storage unit and with said first server and with a second server instructing said first server;

another storage device connected with said second storage unit; and

a storage controller for controlling said storage devices;

wherein when an instruction for splitting is received from said first server, said storage controller reports end of the splitting to said first server, receives an instruction for backup from said second server, and then transfers information to a backup device from said second storage unit after copy of information from said first storage unit to said second storage unit ends.

2. A storage system as set forth in claim 1, wherein information is transferred from said second storage unit to said backup device after copy of all information from said first storage unit to said second storage unit ends.

3. A storage system as set forth in claim 1, wherein when there is a request for transfer of first information stored

in said second storage unit and second information not stored from said first storage unit into said second storage unit to the backup device, said second information is stored from said first storage unit into said first storage unit and then said first information and said second information are transferred from said second storage unit to said backup device.

4. A storage system as set forth in claim 1, wherein when there is a request for transfer of first information stored in said second storage unit and second information not stored from said first storage unit into said second storage unit to the backup device, said first information is stored from said second storage unit into a memory that is connected with said storage controller unit and acts to store information and said second information is stored from said first storage unit, and then said first information and said second information stored in said memory are transferred to said backup device.

5. A backup method for a storage system having a first storage unit for storing information from a first server, a second storage unit for storing the information stored in said first storage unit, a storage device connected with said first storage unit and with said second storage unit and connected with said first server and with a second server instructing said first server, and a storage controller for controlling said storage device, said method comprising the steps of:

causing said first server to issue an instruction for

splitting to said storage controller;

then causing said storage controller to report end of the splitting to said first server; and

then, when an instruction for backup is received from said second server, transferring information from said second storage unit to a backup device after end of copy of the information from said first storage unit to said second storage unit.

6. A backup method as set forth in claim 5, wherein when there is a request from said second server for transfer of information stored in said second storage unit to the backup device, the information is transferred to said backup device from said second storage unit after end of copy of the whole information into said second storage unit from said first storage unit.

7. A backup method as set forth in claim 5, wherein when there is a request for transfer of first information stored in said second storage unit and second information not stored from said first storage unit into said second storage unit to the backup device, said second information is stored from said first storage unit into said second storage unit, and said first information and said second information are transferred from said second storage unit to said backup device.

8. A backup method as set forth in claim 5, wherein when there is a request for transfer of first information stored in said second storage unit and second information not stored

from said first storage unit into said second storage unit to the backup device, said first information is copied from said second storage unit into a memory that is connected with said storage controller and acts to store information and said second information is copied from said first storage unit, and said first information and said second information stored in said memory are transferred to said backup device.

9. A backup system comprising:

servers for storing information;

a first storage unit for storing information from said servers;

a second storage unit for copying the information stored in said first storage unit; and

a storage controller connected with said servers, said first storage unit, and said second storage unit and controlling said first and second storage units;

wherein when said storage controller receives an instruction for splitting from said servers, end of splitting is reported to said servers, an instruction for backup is received from said servers, then information is copied from said first storage unit into said second storage unit, and after the end thereof the information is transferred from said second storage unit to the backup device.

10. A backup system as set forth in claim 9, wherein said servers have a first server for issuing the instruction

for splitting and a second server for issuing the instruction for backup.

11. A backup system as set forth in claim 9, wherein information is transferred from said second storage unit to said backup device after copy of whole information from said first storage unit to said second storage unit ends.

12. A backup system as set forth in claim 9, wherein when there is a request for transfer of first information stored in said second storage unit and second information not stored from said first storage unit into said second storage unit to the backup device, said second information is copied from said first storage unit into said second storage unit and then said first information and said second information are transferred from said second storage unit to said backup device.

13. A backup system as set forth in claim 9, wherein when there is a request for transfer of first information stored in said second storage unit and second information not stored from said first storage unit into said second storage unit to the backup device, said first information is stored from said second storage unit into a memory that is connected with said storage controller and acts to store information and said second information is stored from said first storage unit, and then said first information and said second information stored in said memory are transferred to said backup device.

14. A storage system comprising storage units and a storage

controller for controlling said storage units;

wherein said storage units include first and second storage units; and

wherein said storage controller has

- (a) a memory,
- (b) a first control portion connected with said memory, accepting splitting processing sent from a first server, and reporting end of splitting to said first server,
- (c) a second control portion connected with said memory and accepting backup processing sent from a second server after said report of end of the splitting,
- (d) a third control portion connected with said storage units and with said memory and acting to copy information from said first storage unit to said second storage unit, and
- (e) a fourth control portion connected with said memory and accepting said backup processing, said fourth control portion transferring information from said second storage unit to a backup device after end of copy of information from said first storage unit to said second storage unit.

15. A storage system as set forth in claim 14, wherein information is transferred from said second storage unit to said backup device after end of copy of whole information from said first storage unit to said second storage unit.

16. A storage system as set forth in claim 14, wherein when there is a request for transfer of first information stored

in said second storage unit and second information not stored from said first storage unit into the second storage unit to the backup device, said second information is stored from said first storage unit into said first storage unit, and then said first information and said second information are transferred from said second storage unit to said backup device.

17. A storage system as set forth in claim 14, wherein when there is a request for transfer of first information stored in said second storage unit and second information not stored from said first storage unit into said second storage unit to the backup device, said first information is stored from said second storage unit into a memory connected with said storage controller and acting to store information temporarily, and wherein said first information and said second information stored in said memory are transferred to said backup device after said second information is stored from said first storage unit.